DOCUMENT RESUME

ED 059 828 95 RC 005 997

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TITLE Teachers of Middle School Mexican American Children: Indicators of Effectiveness and Implications for Teacher Education.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE [72]
NOTE 47p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Bibliographic Citations; *Effective Teaching; *Evaluation Techniques; Individual Characteristics; *Literature Reviews; *Mexican Americans; Microteaching; Teacher Attitudes; *Teacher Education; Teaching Procedures

ABSTRACT

A summary of research and related literature on the problem of identifying indicators of teacher effectiveness, this publication is divided into 3 sections: (1) traditional indicators of teacher effectiveness in terms of good teaching procedures (e.g., positive reinforcement) and desirable personality characteristics (e.g., ability to set a favorable climate for teaching); (2) new trends in identifying indicators of teacher effectiveness (e.g., development of systems models and microteaching); and (3) implications for teacher education in the form of a teacher education model--with suggestions for further study. A bibliography of 83 citations is included. (NQ)

ED 059828

TEACHERS OF MIDDLE SCHOOL MEXICAN AMERICAN CHILDREN: INDICATORS OF EFFECTIVENESS AND IMPLICATIONS FOR TEACHER EDUCATION[1]

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[1971]

[1]The information contained herein was gathered pursuant to a grant from the U. S. Office of Education, Department of Health, Education and Welfare. The opinions expressed herein, however, do not necessarily represent the position or policy of the U. S. Office of Education, and no official endorsement by the U. S. Office of Education should be inferred.

RC005997

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INTRODUCTION

One does not have to look very far in the literature concerning the education of the Mexican American child to learn that our monocultural American educational system has failed far too many of these youngsters. For example, the highest percentage of high school dropouts is to be found among the six million persons of Spanish surname who live in the United States. The traditional approach to the "solution" of this problem is to study the children who fail. This approach assumes that the problem is solely with the child.

Among those who are vitally concerned with the education of culturally different children, which includes Mexican American children, there is a growing trend toward placing more of the burden for the child's failure on the institution or system which is responsible for his education. Studying the learner is considered valuable only in the sense that it provides information which will help the teacher be more effective. It is not viewed as a way of finding out what is "wrong" with the child, but as a means of describing the child's strengths as well as his weaknesses.

If studying the learner provides only a partial answer, what else is needed? Could it be that we need to take a closer look at the system to see if it has weaknesses? If we are to do this, we have to break the system into observable parts. One of the parts

which is extremely significant is the teacher. This "part" of the system has been observed from many points-of-view. Our major concern here is with one specific element--indicators of teacher effectiveness.

Since the early days of educational research, indicators of teacher effectiveness have received a major share of the attention. Likewise, much of the "thought-oriented" (as opposed to research-oriented) educational writing which has found its way into print has been related to teacher effectiveness. The reason for this interest is obvious to the serious student of education--improvement of any educational system depends largely upon improved effectiveness of the teacher within the system. Furthermore, if teachers are to improve their effectiveness, they must have a model which they can emulate and by which they can be evaluated.

Educators view a model of teacher effectiveness as being a valuable source of input for the teacher preparation program. If college professors have a clear picture of what it takes to make an effective teacher then they will be better able to design a program which will produce the desired characteristics.

Another value of such a model is in the areas of selection, promotion, and retention. A valid and reliable set of indicators of teacher effectiveness enables those charged with the responsibility of making decisions concerning selection, promotion, and retention to make more judicious recommendations related to these factors.

In order to deal with the problem of identifying indicators of teacher effectiveness in a logical manner, especially those relevant to the teacher of middle school Mexican Americans, this summary of the research and related literature has been divided into three sections. The first section deals with traditional indicators of teacher effectiveness, and the second one deals with new trends in identifying indicators of teacher effectiveness. The final section is concerned with the implications for teacher education which may be derived from the statements made relative to the indicators of teacher effectiveness.

TRADITIONAL INDICATORS OF TEACHER EFFECTIVENESS

As has been pointed out, the search for valid indicators of teacher effectiveness is not a new one: educational researchers have always been concerned with this problem either directly or indirectly. They have gathered a great deal of data and conducted numerous experiments in an attempt to identify characteristics of the "effective teacher." Their efforts have generally dealt with the identification of "good teaching techniques" and "desirable personality traits."

Non-researchers in education have also spent a considerable amount of time "thinking" about what it takes to be a good teacher. Like the educational researchers, they have primarily been interested in "good teaching methods" and "beneficial personality characteristics;" however, unlike the educational researchers, they have used more of an intuitive than a scientific method.

Little, if any, of this early work deals specifically with indicators of effectiveness related to teachers of middle school Mexican American children. Nevertheless, a knowledge of the past is often of great value in understanding the present. In this case a knowledge about indicators such as "good teaching procedures" and "desirable personality traits," which have traditionally been used to predict or assess teacher effectiveness in general, is useful in

understanding the new trend in this area and its application to teachers of sixth, seventh, and eighth grade Mexican Americans.

While the material presented under the headings of "good teaching procedures" and "desirable personality traits" is not meant to be comprehensive, it is adequately representative. For a more extensive review of the research in these areas the reader can refer to the work of Gage (1963), Mitzel (1960), and Morsh and Wilder (1954).

GOOD TEACHING PROCEDURES

Popham (1971) indicates that in nearly all of the early investigations which sought indicators of teacher effectiveness there was a concentration on the instructional techniques used by the teacher: the goal was to identify "good teaching procedures." It was felt that once these "good teaching procedures" had been identified, they would have considerable implications for teacher preparation programs as well as teacher evaluation.

Positive Reinforcement

One of the instructional techniques which is identified by several researchers and thinkers alike as being a "good teaching procedure" is the use of positive reinforcement. In fact, Dollins (1960), Ebel (1969), May (1970), Monly (1968), Seibel (1967), Smith (1961), and Travers (1967) all indicate that an effective teacher has, among other things, the ability to use the technique of

reinforcement in an appropriate manner. These authors generally believe that immediate reinforcement of correct responses will promote learning. The plea is for teachers to be success and not failure oriented. Christ (1969) indicates that every teacher provides either positive or a negative feedback to learners through each gesture he makes, and May (1970), and Seibel (1967) state that positive reinforcement is superior to a negative type. Instead of penalizing a child who is behind, every step he takes toward the achievement of the objectives should be reinforced in a positive manner.

Diagnostic Evaluation

Curtis and Bidwell (1970) report that skill in diagnostic evaluation is indispensable for effective teaching. They believe that the effective teacher must be able to identify the current status of the learner in order to recognize the most appropriate direction in which to proceed. This is a "good teaching procedure" because it is envisioned as an ongoing process which occurs during instruction not apart from it.

Use of Instructional Technology

A teaching procedure which several have identified as an indicator of teaching effectiveness is the quality and quantity of use of instructional technology in the classroom. The use of closed circuit television, overhead projectors, motion pictures, computer

assisted instruction, slide-tape materials, filmstrips, and video-tapes are all examples of employment of instructional technology. Allen and Ryan (1969) make specific reference to the idea that one of the characteristics of an effective teacher is the ability to use audiovisual aids. They even suggest means for developing this skill in people who wish to become or already are teachers.

Vary Classroom Interaction

Amidon and Hough (1967), Flanders (1960), Harris (1969), and Johnson (1969) all indicate that the ability to promote a variety of interaction styles and types of classroom discussions is a teaching technique which provides an index of teaching effectiveness. Soar (1968) supports this by indicating that an effective teacher should be able to control the pattern of interaction in such a manner that optimal learner growth can take place. He states, for example, that indirectness is essential for greatest growth in subjects such as reading, vocabulary, and creativity.

Individualization of Instruction

Among others, Hunter (1970), Petrequin (1968), and Walker (1969) state the necessity for an effective teacher to be able to individualize instruction. They hold that this technique enables the teacher to help the learner structure his own program and proceed at his own pace. This (learner proceeding at this own pace) is, according to the authors, the most effective kind of instruction.

Ability to Organize

Mattson (1968), and Schumann (1964) assert that one of the characteristics of an effective teacher is his ability to develop an organized plan of attack for the purpose of guiding his teaching. They state that frequently lesson plans are too vague. A good indication of an effective teacher is his ability to use this technique of organizing a clear approach to a given problem or situation.

On the other hand, Turner (1969) argues more or less in the opposite direction where creativity is concerned. He professes that in this case, highly organized teachers tend to defeat pupil creativity.

Use of Demonstrations

According to several writers, Callahan (1966), Hoover (1968), and Manning (1970), the effective teacher uses a great deal of demonstration techniques. According to Manning (1969), the good teacher supplements demonstrations with pictures which illustrate important points.

Other Techniques

The "good teaching procedures" mentioned so far barely scratch the surface of a vast list of techniques which have been identified as being indicators of teaching effectiveness. Good vocal quality is frequently mentioned, Spaulding (1965), and ability to

communicate knowledge through the lecture is cited by Baldwin (1963), and Hiller (1969) as a quality of an effective teacher. Allen and Ryan (1969), and Olivero (1970) mention a teacher's ability to establish set, establish appropriate frames of reference, achieve closure, use questions effectively, recognize and obtain attending behavior, control participation, provide feedback, and set a model as being indicators of effectiveness as measured by the Stanford Teacher Competence Appraisal Guide.

As was pointed out initially, all of these characteristics are related to "good teaching procedures." For a look at the other traditional indicators of teaching effectiveness we must consider personality traits which have been identified as beneficial.

DESIRABLE PERSONALITY CHARACTERISTICS

The research and thinking that has been directed towards the identification of desirable personality characteristics of the effective teacher has been considerable to say the least. Numerous efforts have been made to determine which personality traits the good teacher really should possess. Many checklists and rating scales have been developed to measure the degree to which the person under scrutiny possesses what the designer views as important factors in the success of a teacher.

In addition to characteristics such as attitudes and self-image, ability to set a favorable climate, and disposition factors, education and experience are included under this general category of desirable personality characteristics.

Attitudes and Self-Image

Blackburn (1965), Devane (1961), and Horn (1970) all report that one important characteristic of an effective teacher of junior high school youngsters is that the person teaching at this level really wants to instruct students of this age group. This kind of an attitude factor would seem to apply with even more force to the teacher of minority group children.

Does not stereotype. Faunce (1968) indicates that the effective teacher who works with culturally different children does not stereotype them and at the same time he recognizes racial and social discrimination.

One of the common stereotypes held by many who teach sixth, seventh, and eighth grade Mexican Americans is that they just cannot learn as effectively as other children: they are slow. Not only is this stereotype false, but is seriously hinders the progress that the learner might make. DeWitt (1970) points out how this works. He says that for a teacher to be effective he must expect the learners to succeed. Meichenbaum (1969) seconds this position by pointing out that a teacher's expectancy of pupil's academic ability modifies the pupil's behavior in a significant way.

Respect for students. Expectation of success cannot come about until a more fundamental characteristic of effectiveness is displayed by the teacher--respect for students. DeVane (1961), Horn (1970), Ivey (1963), and Morrison (1969) all cite this as a basic

characteristic of an effective teacher. Faunce (1969) cites empathy as an indicator of respect.

Open and flexible. An effective teacher must be open and flexible according to Gordon (1962). Furthermore, Beymer (1970), Bills (1960), Combs (1964), DeBruin (1969), DeWitt (1970), Gordon (1962), Good (1968), Hamachek (1969), and Kleinman (1966) assert that the effective teacher is one who identifies with people, feels worthy, and feels wanted. Good (1968) goes on to say that this requires a person who is confident of himself.

In addition to the above mentioned characteristics, DeBruin (1969) states that the effective teacher is versatile, creative, and enthusiastic.

Involvement with outside activities. An important characteristic of effectiveness identified by Mattson and Buekley (1968) is teacher involvement with outside activities. Their study indicated a high correlation (.78) between teacher involvement with outside activities and effectiveness as measured by a background questionnaire, behavior dimension rating by principals, and ranking of overall effectiveness by a panel of experts.

Receptive attitude toward experimentation. A receptive attitude toward experimentation is a characteristic of effectiveness mentioned by Good (1968), Harris (1969), and Schumann (1964). This would seem to confirm Gordon's (1962) identification of flexibility as an essential quality of the good teacher.

Good mental health. Finally, in the article "What are Teachers Really Like?" (1969) it is stated that good mental health is surely one essential characteristic of an effective teacher. It would seem that this would almost go without saying.

Disposition Factors

A great many authorities have attempted to identify the disposition factors possessed by the effective teacher. One of the most frequently mentioned characteristics is enthusiasm. Adams (1969), Flanagan (1961), Horn (1970), and Ivey (1963) all emphasize the importance of this point.

Patient and understanding. An effective teacher is one who is patient and understanding. According to Abramorrity (1970), Barr (1946), and Getzelr (1963) this is especially true of teachers who teach culturally different children. To Abramorrity (1970), Adams (1969), Barr (1946), Beymer (1970), and deBruin (1969) this calls for a teacher who is sensitive to pupils' problems, both academic and personal.

Friendly and cheerful. Getzelr (1963) states that an effective teacher is friendly and cheerful. This idea is reinforced by Adams (1969), Barr (1946), Combs (1964), Hamachek (1969), and the article "What do you Consider . . .?" (1970). All of these articles afirm that a good teacher must have a sense of humor.

Integrative pattern of contact. The interaction analysis work of Anderson and Hunka (1963) supports the belief that an effective teacher uses an integrative pattern of contact. Relative to the promotion of creativity, Turner (1969) calls for a warm, spontaneous, child-centered teacher. This type of individual would probably be one who demonstrates an integrative pattern of contact with students.

Professional appearance. Barr (1946) points out the fact that one of the most frequently mentioned characteristics of an effective teacher is the demonstration of professional appearance. This item is to be found on a great many checklists or rating scales having to do with teacher effectiveness evaluation.

Ability to Set a Favorable Climate

O'Connor (1969) states that "when children fail, environment is often at fault." If this is true then how can it be controlled? The answer, according to several sources, lies with teachers, for although teaching machines have domonstrated instructional effectiveness in many areas, only the classroom teacher can develop and promote a favorable climate for learning.

Warm, human, and personal. Prime requisites a teacher must possess in order to be effective, according to Barr (1946), Good (1968), Horn (1970), and Quinn (1968), are the qualities of being warm, human, and personal. This in turn fosters mutual respect which is a desirable aspect of a favorable climate according to Ivey (1963), Horn (1970), and Morrison (1969).

Non-verbal factors. Holt (1968) indicates that the primary factor in causing failure in school is fear: in overcoming this, Bruce (1969) suggests that non-verbal factors may be more important than verbal ones since they constitute a larger proportion of total teaching behaviors. Another characteristic of an effective teacher which would help overcome fear is pointed out by House (1970). He indicates that a good teacher allows, even encourages, students to participate in decision making.

Accepts language of child. Of special importance to teachers of sixth, seventh, and eighth grade Mexican American children are the points identified by Broman (1969). He asserts that the effective teacher accepts the language of the child and builds upon this language. He suggests that the teacher who does this will encourage children to talk and will plan for integrated language development in all subject areas.

Small classes. Ebel (1969) declares that where classes are small, there is generally a tendency to have a greater variety of activities, enrichment of materials, and more individualization. Where small classes are not possible, he indicates that the effective teacher will be able to organize and work with small groups in the regular class. This, according to Ebel, promotes generalizing, analyzing, and creating.

Education and Experience

Characteristics of teacher effectiveness related to education and experience are mentioned numerous times in the literature. Although we have a difficult time identifying the effective teacher, there seems to be a great number of "authorities" ready, and willing to tell us the kind of prgoram he should have had and the effect of experience on effectiveness.

Knowledge of subject matter. The most frequently mentioned factor related to education is knowledge of subject matter. Barr (1946), Fatter (1961), Hill (1965), Idzerda (1966), Kleinman (1966), Towle (1969), and Vars (1969) all rate this high on the scale of ideal qualities of effective teachers. Combs (1964), and Harrington (1969) go a step further by indicating that excellent teachers possess a knowledge of related subjects. According to Barr (1946), Fatter (1962), and Scott (1969), the NTE exams are effective measures of a teachers overall knowledge, especially in the professional areas. Along the same line, Fatters (1962), and Scott (1969) state that teachers who have had professional preparation are more effective than those who have not had such training. In terms of knowledge, Field and Schour (1967) assume that the effective teacher will have a knowledge of psychoanalytic and ego psychology. Harrington (1969) makes the same statement but goes further by including sociology and philosophy. The natural conclusion is reached by Guthrie (1969) who implies that a high academic degree is a good predictor of teaching success.

Knowledge of students. Another kind of knowledge is possessed by the effective teacher. Getzelr (1963) identifies this as knowledge of students' home background, their physical and mental health, and their outside activities.

Experience. Another indicator of teaching effectiveness that is frequently mentioned is experience. Guthrie (1969) indicates that teachers with tenure are more effective than those without it. However, a number of educators, Barr (1946), Fatters (1962), Guthrie (1969), and Kleinman (1966), state that cross-sectioned data indicates that teachers' rated effectiveness increases rapidly at first with experience and then levels off at five years or beyond.

NEW TRENDS IN IDENTIFYING INDICATORS OF TEACHER EFFECTIVENESS

In spite of the dedicated work which has continued for over one-half of a century, the results yielded by the identification of "traditional indicators of teacher effectiveness" have been disappointing. For example, Brainard (1961), Good (1968), Kleinman (1966), Scott (1969), and Stutzman (1968) all indicate that measures of intellectual potential and achievement such as I.Q. tests, College Board Exams, grade-point-average in high school and college, Graduate Record Exam scores, and aptitude and achievement tests do not discriminate between effective and ineffective teachers. Kleinman (1966), and Scott (1969) go on to point out that there is no substantial amount of evidence that cultural background or socio-economic status is significantly related to teacher effectiveness. They also report that teacher effectiveness is not dependent on sex or marital status. Kleinman (1966) continues by asserting that the quality of the teacher's voice is not considered an important factor. He summarizes by stating that data available so far fail to establish or support the existence of any particular aptitude for teaching. He says that attempts to identify characteristics of successful and unsuccessful teachers through the process of making lists of traits based on opinion are useless for prediction, selection, or evaluation.

Arthur Combs (1965) believes that the most effective teacher is the one who is most fully himself and has developed a style which actualizes his personality. This implies, at least according to Combs, that there is no one set of characteristics which describes the effective teacher.

The above mentioned points are summarized by Morsh and Wilder (1954) who, after an extensive review of research on teaching effectiveness conducted between 1900 and 1952, came to the conclusion that no single teacher act had been identified which was invariably correlated with learner achievement.

The upshot of all of this is a new trend in identifying indicators of teacher effectiveness. There are two distinct approaches evident: looking at specific teacher performance indicators and examining the results of instruction--student learning.

TEACHER PERFORMANCE INDICATORS

One possible approach in getting at teacher effectiveness is through the identification of specific kinds of behaviors needed by the teacher to promote learning. Once these have been identified in the form of behavioral objectives, measurement is possible to determine if the teacher in question actually possesses the desired behaviors.

Development of System Models

A great deal of effort has gone into an attempt to build system models from which teacher education programs could be developed. In a comprehensive review of such efforts at ten institutions (Florida State University, University of Georgia, University of Massachusetts, Michigan State University, Northwest Regional Educational Laboratory, University of Pittsburgh, Syracruse University, Teachers College, Columbia University, The University of Toledo, and The University of Wisconsin) Bruce Joyce (1970) reports that all the models view the teacher as a behaviorist. All of these projects support the position, either implicitly or explicitly, that teacher performance is one way to predict teacher effectiveness. However, before this can be done it is necessary to identify the appropriate performances of the effective teacher. This is done through the development of a model to be emulated. Joyce points out that the performance model needs to be as complete as possible. This performance model should be of a functioning teacher. One caution that is mentioned is that the model used to identify needed performances by which effectiveness will be rated be conceptualized in terms of the system within which the teacher in question is or will be operating. Dr. Joyce says that, at a minimum, classrooms and schools need to be described along with teaching teams if he is or is to be a member of a team. He also suggests that the wider systems of the community within which the teacher functions should be included in the conceptualization.

Once the above is done and the specific performances desired have been identified, the teacher can be evaluated on the basis of the degree to which he possessès the ability to demonstrate these behaviors.

Development of Microteaching

The trend toward the acceptance of performance indicators as an alternative to the traditional means of identifying teacher effectiveness is further demonstrated by the effect that the research conducted in relation to microteaching has had on teacher preparation programs and employment and retention practices across the country.

The microteaching concept is based on the performance indicators of effectiveness concept. Gage (1963) offered an alternative which was designed to reduce the complexity of the problem of teacher effectiveness. He suggested that instead of trying to identify criteria for the total effectiveness of teachers, we might be more successful with criteria of effectiveness in specifically defined parts of the role. Gage called this "micro-criteria of effectiveness."

At about this same time, a group of Gage's colleagues at Stanford were in the process of developing the technique known as microteaching. Microteaching is a scaled down sample of real teaching in which teachers can develop desirable performance

abilities. The technique allows the application of clearly defined teaching skills to carefully prepared lessons in a planned series of brief teaching encounters.

The microteaching concept was first applied in Stanford's teacher intern program in the summer of 1963. Since that time it has been utilized as a training technique at numerous other institutions.

In addition to preservice applications, microteaching has been utilized to develop and assess performance of inservice teachers, supervisors, administrators, Teacher Corps Interns, and Upward Bound students.

RESULTS OF INSTRUCTION

Kleinman (1966) indicates that a major problem in the study of effective teaching has been whether to assume that "effectiveness" is concerned with a teacher's attributes in a specific teaching situation or if it is concerned with the results which come out of a teaching situation. There is a growing feeling that effective teaching can only be measured by its final product--effective learning. Members of the Northwest Regional Educational Laboratory (1968) put it in slightly different words. They assert that the effective teacher "can bring about appropriate changes in pupil behavior."

There are many others who base their assessment of effectiveness on the results produced by instruction. For example, Ebel (1969) defines teacher effectiveness as an area of research which

concerns itself with relationships between the characteristics of teacher, teaching acts, and their effects on the educational outcomes of classroom instruction. Medley and Mitzel (1963) declare that ultimately, teacher effectiveness must be defined in terms of effects on pupils or changes in pupil behavior. In fact, at the end of their comprehensive report, they conclude: "These findings call into question the relevance of a whole of a considerable body of research in teacher effectiveness which has used ratings of some kind as a criterion of teacher effectiveness." Gage (1963), Jenkins (1969), and Saadeh (1970) also agree with the results approach to the identification of teacher effectiveness. They state that the ultimate criteria of a teacher's effectiveness is his effects on his pupils' achievement of objectives.

Barr (1950), in his summary of the various approaches to the problem of determining teacher competency, identified three approaches to the measuring procedures. They were (1) definitions based on estimates of traits assumed to operate in the teaching act, (2) definitions based on appraisals of activities included in instructing, and (3) definitions derived from pupil growth. He asserts that the third approach, dealing with results of instruction, is the soundest. He goes on to say that using pupil growth as the basis of measuring teacher efficiency is contingent upon the availability of valid instruments for measuring the factors of growth, especially the major ones reflected in one's concept of the purposes of education.

He points out that teaching is only one among many factors working to cause changes in pupil growth and achievement. He indicates that the influence of factors other than teaching efficiency must be held constant in the study of student growth as measured by achievement scores.

Feifer and others (1960) report that the majority of research concerned with teacher competency, where children's achievement has been used as the criterion, has been based on two assumptions: (1) most children in a particular class with a given teacher react to instruction in the same way, and (2) the effective teacher may be described by a basically definite pattern of behaviors which are valid for most teaching encounters. Feifer asserts that in the above mentioned research, the higher achievement of some students is "averaged" with the lower achievement of others. Seldom is achievement of different kinds for an individual student considered together; achievements of students with different prior achievements are put together; achievements of students of different levels of physical health, social class and cultural background are lumped into composite scores. This is due, in part to an oversight, and in part to the fact that it is extremely difficult to separate such variables. Another factor which is frequently overlooked is the environment in which the teacher operates.

One point made by Feifer and others (1960) is that there are various patterns of teacher behavior which are directly related

to different kinds of students achievement and therefore that there are various kinds of competencies. Another point mentioned is that in a specific class of students a given teacher's behavior will elicit one type of achievement for a part of the class, another type for a second part and for some students very little effect at all.

In summary, they believe that the achievement of a student depends primarily upon his feelings, his intelligence, and upon the behaviors of the teacher. Of secondary importance is his social class and his physical health.

IMPLICATIONS FOR TEACHER EDUCATION

In a conference held in November 1963, which was called by Lyndon B. Johnson who at that time was Vice-President of the United States and chairman of the President's Committee on Equal Employment Opportunity, it was stated that the schools should emphasize the bicultural situation in the Southwest rather than ignore or repress it. Karr (1969) states that to solve the problems of low-income bicultural, bilingual Mexican American students, teacher education must prepare teachers who can cope with cultural, psychological, and linguistic conflicts. To be able to do this, the teacher education program should provide training for the teacher (1) to understand the dysfunctions between the Anglo values and the values of the Mexican American culture, (2) in counseling the difficulties of this, and (3) in how to teach English as a second language. Few who are interested in the education of Mexican American students would argue with any of the points mentioned above, but many might ask how you can prepare teachers to do all of those things. What is needed appears to be some concrete suggestions.

Up to this point, we have been primarily concerned with indicators of teacher effectiveness; however to stop here would be of little assistance to those who are interested in improving effectiveness rather than merely identifying it. For this reason,

this final section is devoted to several implications for teacher education programs specifically concerned with preparing teachers who will teach middle school Mexican American children. Many of the points mentioned apply to the preparation of any good teacher; however, a great number of the items are aimed specifically at the preparation programs for teachers of sixth, seventh, and eighth grade Mexican Americans. Factors considered include the development and evaluation of a teacher education program, and a need for further study on certain aspects.

DEVELOPMENT OF A TEACHER EDUCATION MODEL

Joyce (1970) reports that the Comfield approach to teacher education recommends four steps in the development of a teacher education program. Step one is to state the desired pupil outcomes. These are the goals of education. The second step is to identify the conditions that will bring about the desired pupil outcomes. These conditions form the instructional program within the schools. The third step is to identify the performance competencies needed by teachers to provide the conditions that will bring about the desired pupil outcomes. These are the goals of teacher education. The fourth and final step is to identify the conditions that will bring about the performance competencies teachers need to provide the conditions that will bring about the desired pupil outcomes. This becomes the teacher education program.

Perhaps a more comprehensive and functional approach is the one in which Joyce (1970) outlines six tasks which must be completed in the development of a program model for teacher education. When these steps have been completed, he states that the result is a program paradigm which is ready for feasibility testing, development, and implementation. The six necessary steps are: (1) develop a performance model, (2) analyze the performance model and break it down into sets of behavioral objectives, (3) specify training subsystems, (4) develop the overall training system, (5) develop management systems, and (6) reconcile the program and product with the client in the field. Joyce says that provisions should be included for revision and redevelopment. The suggestions made by Joyce appear to be sound in terms of designing a teacher education program to prepare teachers of sixth, seventh, and eighth grade Mexican American students.

The suggestions and implications which may be drawn from the various statements made by the authorities concerning teacher education in general and teacher education for teachers of middle school Mexican American students in particular are grouped under the six steps mentioned by Joyce to illustrate the feasibility of this approach.

Develop a Performance Model

The performance model for teacher education should be a working model of a functioning teacher who is equipped to bring about desired pupil outcomes. In conceptualizing the teacher, the system in which he is to work must be considered. This includes school characteristics as well as teacher characteristics. Quinn (1968) states that the predominant socioeconomic class of the students in the schools where the teacher will teach must be considered. Another factor that should receive attention is the community within which the school operates.

Separate Performance Model Into Sets of Behavioral Objectives

Once the performance model has been identified, it is necessary to break this model down into specific sets of behavioral objectives for the participants in the program to accomplish. This is a vital step in the development of the overall program, and it should utilize input from the community public schools, students, and the university.

The value of behavioral objectives is well documented in educational literature. Although the successful achievement of a given set of behavioral objectives does not insure effectiveness in terms of the ability to produce learning, it is, according to Mood (1970), a necessary step in that direction. He states that

teacher performance indicators are more appropriate for judging teacher effectiveness than certification, courses completed, or experience.

Specify Training Subsystems

In the specification of training subsystems, program components are developed to promote the accomplishment of the behavioral objectives. Specific teaching and curricular strategies need to be constructed. Some of the possibilities are mentioned below.

Sensitivity training techniques may be used to accomplish certain kinds of behaviors. For example, Arvizu (1971) indicates the need to provide participants with in depth understanding of the cultural background, acculturation patterns, personality, and resulting behavior of Mexican Americans. While some of this understanding might be gained through course work in anthropology and sociology (for example), a greater level of understanding might be promoted through sensitivity sessions.

An opportunity for a variety of experiences is also considered necessary. Such things as (1) participant observation within the Mexican American community, (2) live-in and travel-study opportunites, (3) initiation of a "Breakfast for Niños" program, (4) initiation of a bilingual, bicultural radio program, (5) facilitate community organization for raising money for adding

playground equipment and a bilingual library for a local elementary school, (6) initiation of an underground pre-school,' (7) help elect a Chicano city councilman and in the process help set up the mechanism for voter registration, (8) organize workers into adult education classes, (9) tutor children on a regular basis in one of the target schools, (10) initiate in-service programs in the cultural life styles of Mexican American students, (11) contact successful Mexican American businessmen, professionals, and community leaders to rap with students, and (12) start a regular teacher interaction program between elementary and secondary teachers to serve middle school students,are a few of the types of things recommended by Arvizu (1971), and the Association of Mexican American Educators (1970).

Because students tend to have a favorable attitude toward learner-directed study, individualized instruction in the form of instructional packages or instructional modules should be utilized.

Karr (1969) states that even with fairly simple teaching skills such as the use of observation and classification questions, most teachers need behavior modification experience beyond traditional classroom instruction. As has already been illustrated this experience can be provided for through the use of simulation and microteaching techniques. These techniques enable one to reduce the complexity of the situation.

Develop Overall Training System

Once the subsystems have been developed, it is essential that the overall training system be developed in order to provide for interlocking relationship between all of the components. Joyce (1970) states that a program planner is always tempted to develop separate components which have their own distinctive strategies, their own instructional materials, and their own unique procedures for staff training. This should be avoided: components need to be related to each other in a systematic fashion.

When considering the overall training system, the performances which will be required of the training agents must be specified. In such cases where the training agents do not already possess the desired performance abilities, training for them must be built into the overall program. This training should be of a continuous nature to accomodate new additions to the staff. Sensitivity sessions, simulation techniques, and microteaching are some of the strategies that could be employed here as well as with pre-service teacher trainees.

Develop Management Systems

Anytime a large program is developed management systems for the purpose of monitoring are necessary. Joyce (1970) states that adequate management systems enable the program to adjust to individual differences among students, to build in program revision provisions, to insure feefback and evaluation for managers, faculty,

students, public schools, and community personnel, and to integrate the components and systems.

Whatever management systems are developed, there should be the built-in provision for the organization of several tracks leading to certification. Not only will this help the program meet the diverse needs and interests of the trainees, but it will provide the public schools with a more diverse pool of candidates from whom to choose.

Reconcile the Program and Product With the Client in the Field

The final step mentioned is the reconciliation of the program and product with the client in the field. The teacher trainee needs to be provided with an opportunity to learn about himself as a person and as a professional. Teachers of ~~sixth, seventh, and eighth-grade~~ Mexican-American children need to be, just as all teachers need to be, competent and humanistic people. ~~Teachers~~ they need to be prepared to maximize what students are already learning in order to honor and legitimatize. The learners to be taught by the prospective teachers need to be studied. Characteristics of the learners should be specified in detail. In addition, characteristics of the teachers, the schools, and the community should be considered.

With this job, just as is the case for all the steps in developing the teacher education program, provision should be made for community and student input in addition to public school and university involvement.

In addition to the points mentioned by Joyce (1970), there are at least two additional factors which should be included in the development of a teacher education program: (1) selection of participants, and (2) evaluation of the program.

Selection of Participants

Critical to the success of any program is the selection of those who are to participate. Several points related to this are mentioned in the literature; however the most frequently mentioned factor concerning the selection of teachers for Mexican American students is that they be bilingual. The reason why this is so crucial is that the one of the major causes of failure by Mexican American students is a language barrier. If teachers are to be able to communicate effectively with students, they must speak a language the learner understands.

The appropriateness of bilingualism as a selection criterion is supported by Ott (1967) who states that giving Mexican American students the same instruction, including reading in English, as the native English-speaking child ignores the fact that the students from Spanish-speaking background have little or no facility in oral English.

Another point which should receive attention is that prospective teachers entering the innovative type of program with which we are concerned should have a major concern for community work.

Closely related to the above mentioned item is perhaps the most important factor of all: only students who will voluntarily

commit themselves to the objectives of the new program should be selected. Furthermore, the candidates should be screened for sensitivity and competency. One indicator of sensitivity would be a genuine concern for and understanding of the educational needs of chilren from Mexican American families.

Evaluation of the Program

Existing and emerging teacher education programs need to be evaluated using a paradigm designed specifically for this purpose. Harootunian and Vickery (1971) propose such a model. Their model includes six steps: (1) goal identification, (2) evaluation strategies,(3) development of evaluation criteria, (4) collection, (5) organization and analysis of information, and (6) decisions. They state that evaluation problems associated with competency-based teacher education are vague because it is not too clear whether these programs will be based upon student behaviors during the course of the program, upon exit competencies, or upon teaching behaviors and student learning when the graduate assumes his professional role. It would seem that the most valuable and comprehensive type of evaluation would include all three factors. It does not make sense to wait until a program has been completed and its graduates are functioning in their professional roles to see if anything needs to be done to improve the program. On the other hand, it is no less true that the ultimate proof is in the final product which in this case is the student being taught by the graduate of a given program. It

should be mentioned that when product evaluation of this type is considered individual achievement, not just group achievement, should be taken into account. Furthermore, prior achievement, physical health, social class, racial and cultural background need to be considered. First look at the students feelings, intelligence, and teacher acts then look at social class and health.

To be effective, long-range evaluative instruments need to be utilized to measure goals and performances.

NEED FOR FURTHER STUDY

As Barr (1950) points out, the ultimate measure of teacher effectiveness is the changes produced in the students being taught. Therefore, it is logical to evaluate teaching effectiveness on the basis of pupil growth. However, according to Barr, a practical procedure for accomplishing this has not yet been developed.

From the above statement it would seem sound to recommend research aimed at identifying teacher competencies which make for a high level of effectiveness for different purposes, different people, and different situations. Barr states that after such identifications have been made, it may be possible to identify patterns of abilities which have high correlations with teaching success in a number of different teaching situations.

Feifer and others (1960) state that Barr's thesis concerning a valid approach to the problem of teacher effectiveness logically leads to an analysis of the overall problem into three sub-problems: (1) What kinds of student's achievement can be found in classes

taught by different teachers, and for what kind of children is such achievement shown? (2) What does the teacher do in terms of behavior patterns, which is related to the various kinds of achievement demonstrated by students in various kinds of teaching environments? and (3) What kinds of teacher experiences and personality factors are related to the kind and quality of teacher behavior and activity revealed in relation to students. They assume that research directed toward the three questions mentioned above will result in specific generalizations concerning the kinds of knowledge, skills and personality factors which teachers should possess if they are to be effective with students.

The position taken by the President's Commitee on Equal Employment Opportunity in 1963 was that the schools should emphasize the bicultural situation in the Southwest. Karr (1969) proposed that to solve the problems of low-income bicultural, bilingual Mexican American student, teacher education must prepare teachers who can cope with cultural, psychological, and linguistic conflicts. In order to do these things, a new type of teacher education program needs to be developed.

Joyce (1970) states that in order to develop a program model for teacher education, six tasks must be completed: (1) develop a performance model, (2) analyze the performance model and break it down into sets of behavioral objectives, (3) specify training

subsystems, (4) develop the overall training system (5) develop management systems, and (6) reconcile the program and product with the client in the field. This approach is a valid one for use in developing a teacher education program for training teachers of middle school Mexican American students.

Several important factors concerning the selection of participants for the teacher education program are mentioned in the literature. Points considered of primary importance in the selection process are: bilingualism, concern for community work and voluntary participation.

Evaluation of a program is essential to its success. Harootunian and Vickery (1971) propose a model for evaluation of teacher education programs. Their model includes six steps: (1) goal identification, (2) evaluation strategies, (3) development of evaluation criteria, (4) collection, (5) organization and analysis of information, and (6) decisions.

The suggestions made here are not considered to be complete. There exists a need for further research. This is especially true in terms of how to evaluate teaching effectiveness in terms of pupil growth.

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